WORLD RESOURCES INSTITUTE | PEW CENTER on Global CLIMATE CHANGE | NEW AMERICA FOUNDATION

Welcome to

Webinar #8: **Offsets**

Moderator: **Judi Greenwald**, Pew Center
Speakers: **Mike Burnett**, The Climate Trust
Chris Sherry, New Jersey DEP

Tuesday, February 5, 2008
11:30 am - 1:00 pm PST
12:30 pm - 2:00 pm MST
1:30 pm - 3:00 pm CST
2:30 pm - 4:00 pm EST

Quality Offsets Have an Important Role

Presentation to:

Designing a Regional Cap-and-Trade Program

Webinar #8: Offsets

February 5, 2008

The Climate Trust
Solutions for a low carbon future

Mike Burnett
Executive Director
mburnett@climatetrust.org
503-238-1915

Overview

- How do offsets fit in a comprehensive climate policy?
- How is offset quality defined?
- Why include offsets?
- Should there be geographic and quantitative limits?
- What sectors should be allowed?
- Which approach for defining offsets should be used?
- How should an offset mechanism be implemented?

Integrated suite of climate policies

Technology regulation

- Building, equipment, and appliance standards
- Smart growth/low carbon transportation infrastructure
- Emissions trading and offsets

Providing financial incentives

- Tax credits, loan programs
- Utility programs
- Decouple utility revenues from sales
- System benefit charge
- Use of auction proceeds (if auction)

Greenhouse gas offsets:

Quality is paramount

The promise of offsets

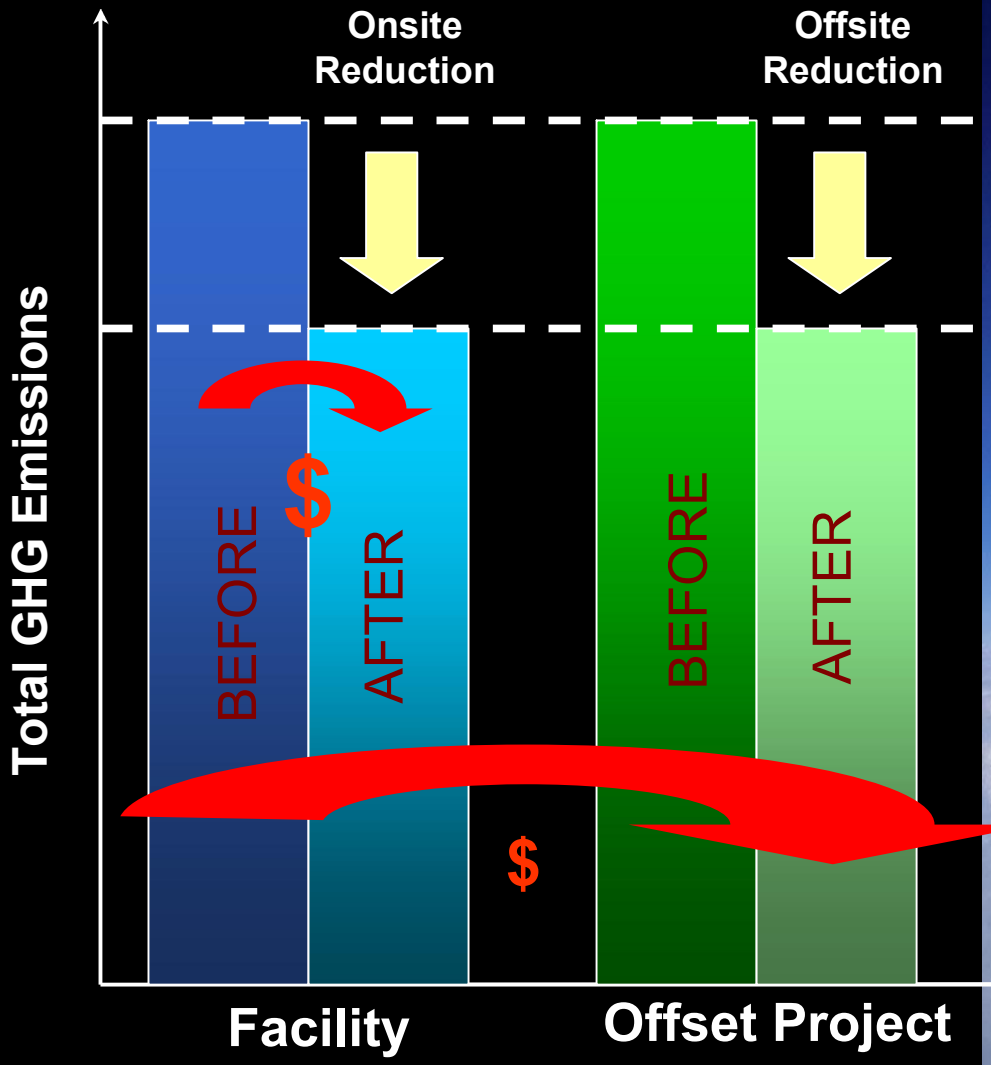
- Real, verified reduction in greenhouse gas levels
- Equivalent to on-site reductions

Key quality criteria

- Additional
- Quantifiable
- Permanence
- Leakage
- Monitoring
- Independent verification

The Basic Promise That an Offset Makes

A "Compensating Equivalent" to Facility Reductions



<u>The Basic Promise</u>:

An emitter must invest in its own facility to implement facility reductions. As an alternative, when investing offsite (in offsets) for reductions, the project must demonstrate that it is not required by regulations, that it is not common practice, and that the offset funding helps overcome financial, technological, and/or implementation barriers.

Why include offsets?

- Cost containment
- Involve uncapped sectors
- Technology bridge
- Drive innovation
- Early action
- Co-benefits
- Energy security

Why have a broad geographic scope?

- Global, not local, pollutant
- Lowers cost to society
- Trading with other regimes
- International geopolitics

Why limit geographic scope?

- Local economic development
- Local of environmental co-benefits
- Perceived as less risky: Is it really?

Quantitative limits?

- A limit ensures that capped sectors are required to reduce
- Reasonable limit could be 25% to 50% of reductions
- Limit could decline over time

Determining offset sectors…

Criteria:

- Uncapped sectors
- Quantifiable at the project scale
- Direct vs. indirect reductions

Approaches for defining offsets

Defining offsets:
Standardized approach

- Less subjective, more consistent
- Additionality and quantification is approximate
- More certainty for developers
- Difficult to get them right in the abstract

Defining offsets:
Project-specific approach

- More subjective, less consistent
- More accurate additionality and quantification
- Less certainty for developers
- Less administratively efficient

Defining offsets:
Hybrid approach

Eligibility and additionality

- Standardized screening eliminates non-additional projects
- Then project-specific review

Baseline & quantification

- Project-specific baseline data
- Input into standardized baseline methodology

Many forms of hybrid approach

What has been learned in Oregon?

- Offsets can meet very high quality standards
- Project-specific approach can be timely and cost-effective
- Much market development remains to be done, but is being put into place
- Offsets provide significant environmental and economic co-benefits
- An non-profit is an excellent structure for implementing offsets in a developing market

Roles of a centralized program administrator

- Oversee modifications to offset regulations over time
- Evaluate existing and develop new protocols
- Develop new protocols using a “project-to-protocol” approach
- Evaluate projects and/or operate a third-party certifier system
- Administer offset registry (in partnership with entity registry)

Benefits of a nonprofit administrator

- Governance by member state representatives as a group
- Consistency across states in regulations and rules
- Impartial and independent implementation
- Administrative efficiency
- Centralization of resources, knowledge and expertise
- Adaptability of the program over time
- Increased transparency and accountability

Thank You!

Mike Burnett
Executive Director
mburnett@climatetrust.org
503-238-1915

RGGI Regional Greenhouse Gas Initiative
An Initiative of the Northeast & Mid-Atlantic States of the U.S.

Regional Greenhouse Gas Initiative (RGGI) Offsets Approach

Designing a Regional Cap-and-Trade Program Workshop Series
World Resources Institute, Pew Center on Global Climate Change, New America Foundation

February 5, 2008

Christopher Sherry
New Jersey Department of Environmental Protection

RGGI Program Components

Offsets — Project-based reductions

- End-use energy efficiency (building sector; excludes electric end-use efficiency)
- Afforestation
- Landfill gas capture & combustion
- Methane capture & combustion from animal manure management operations
- SF_6 leak reduction (electricity transmission & distribution sector)
- International carbon allowances & credits under limited circumstances (e.g., CDM)

RGGI Program Components

Offsets — requirements

- Limited to initial project types (to be expanded over time)
- Model rule specifies project criteria:
  - eligibility (generic and category-specific requirements, including additionality criteria)
  - quantification and verification of emissions reductions
  - independent verification requirements
  - accreditation standards for independent verifiers

RGGI Program Components

Offsets — geographic scope

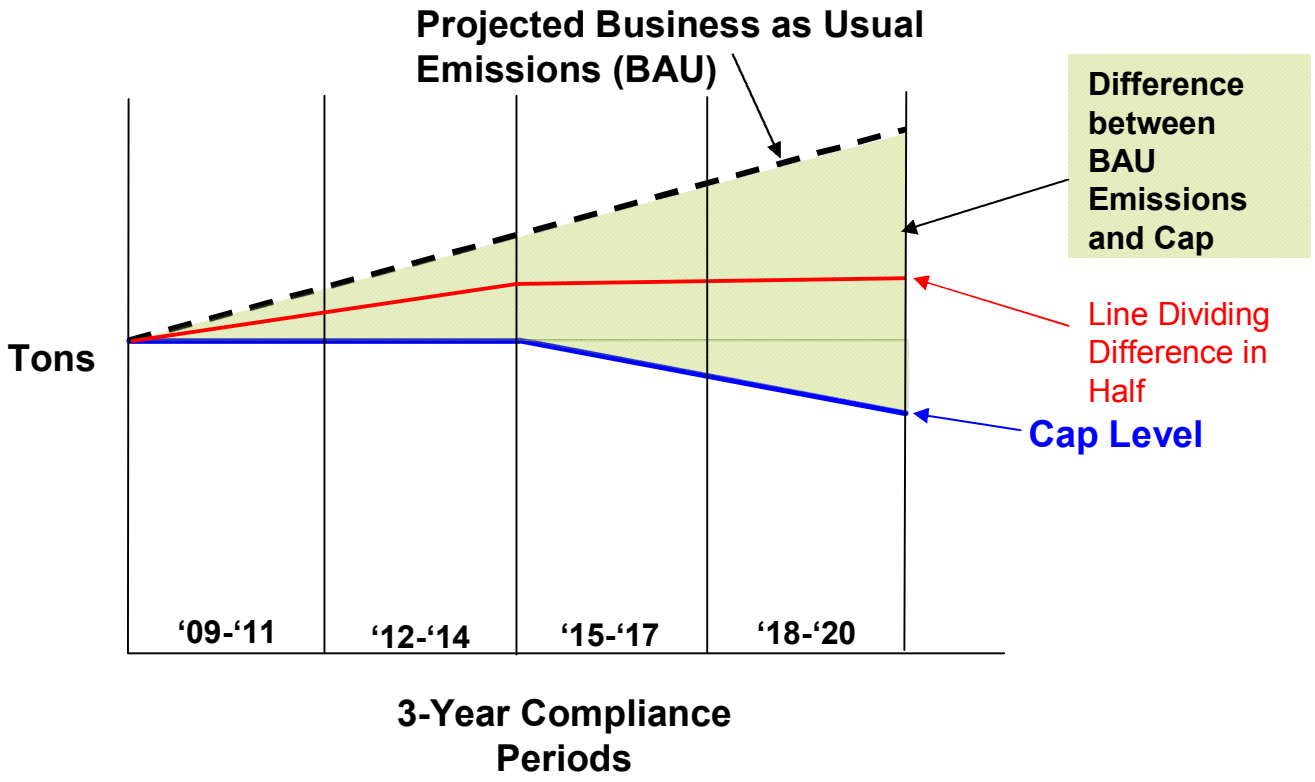
- RGGI participating states
- Offsets from other U.S. states if MOU executed with cooperating state agency to provide compliance and enforcement assistance to RGGI states
- If $10/ton trigger hit, international offsets allowed (e.g., CDM)

RGGI Program Components

Offsets—limit on use

- Limit applied to source compliance; no limit on issuance of offsets (creates competitive market--no limit on potential available pool of offsets)
- Each source may “cover” up to 3.3% of its total reported emissions in a compliance period with offsets
- If $7/ton price trigger hit, limit on use expands to 5% of reported emissions
- If $10/ton price trigger hit, limit on use expands to 10% of reported emissions

Offsets Limit Explained



Limit derived based on 50% of projected avoided emissions

RGGI Offset Design Approach

- Guidance from agency heads and stakeholders to pursue a benchmark/performance standard approach to additionality
- Allows project developers and interested stakeholders to understand program requirements up-front
  - sets a transparent standard for project evaluation
- Avoids administrative case law approach (CDM), increasing process transparency and reducing transaction costs

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Additionality: What do we mean?

- Additionality requires projects to be beyond “business as usual” as defined by the program
  - Actions taken (and related emissions reductions) are "additional" to those that would have otherwise been undertaken in absence of the offsets program
- Is the action being undertaken as part of current standard market practice? If so, the action is likely not additional.
- The action is likely additional if the answer to one or more of the following questions is yes:
  - Is expected offset allowance revenue driving investment in a project beyond standard market practice?
  - Is a project unlikely to occur without significant incentives?
  - Do significant market barriers exist?

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Additionality: Why do we care?

- Additionality is key criteria for ensuring that projects result in “real” emissions reductions
  - Demonstration that incremental environmental benefits are being achieved due to the offset mechanism
- Offsets allow an additional ton of CO_2 to be emitted from sources subject to RGGI, in an amount equal to each ton of emissions reduction achieved through an offset
  - Offset projects must therefore provide reasonable assurance that emissions reductions that would not otherwise have occurred are being achieved

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Additionality: Why do we care?

- Offsets mechanisms without additionality criteria would simply involve quantification of emissions reductions achieved through typical market activities, such as:
  - Normal capital stock turnover due to replacement of old equipment
  - Improvement of production efficiency or business practices to meet competitiveness goals
  - Typical market activities that provide emissions reduction co-benefits (e.g., building remodels, retrofits)
  - Actions undertaken to meet other non-GHG regulatory requirements
  - Actions undertaken as the result of market transformation incentives

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Operationalizing Additionality: How do you accomplish?

- Two levels of additionality:
  - Regulatory additionality: is the project required by law or regulation?
    - Simple yes/no test.
  - Financial additionality: does the project present an attractive investment alternative in the current market in relation to a BAU scenario?
    - Requires a counterfactual assessment - knowledge of a future project scenario that will not actually take place
    - Involves development of a project-specific business-as-usual baseline scenario
    - Involves tests to determine investment attractiveness, such as market barrier evaluation, financial analysis (IRR or NPV for project with and without expected offset allowance revenue, as compared to baseline project scenario)

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Operationalizing Additionality: How do you accomplish?

- Case-by-case evaluation of financial additionality can be problematic
- Process can be resource intensive, for both project developers and regulatory agency staff
- Selection of case-specific scenarios and variables is critical to outcome
- Subject to potential gaming: “tell me a good story”
- Difficult to accurately gauge the investment calculus of individual investors
  - Threshold investment decisions, such as IRR benchmarks, vary among investors

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Operationalizing Additionality: What are the alternatives?

- Use benchmarks and/or performance standards as proxies to infer financial additionality
- Examples:
  - Benchmark: qualitative eligibility criteria for a project that reasonably ensures that project is unlikely under standard market practice
    - For example, prohibition of receipt of both offset allowances and other attribute credits, such as RECs, to address likely current market drivers for categories of projects
  - Performance standard: projects that exceed the standard qualify as additional
    - Emission rate
    - Energy efficiency criteria
    - Market penetration rate

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Challenges to Use of Benchmarks and Performance Standards

- Subject to potential false positives and false negatives (as is case-by-case review approach)
  - Approval of non-additional projects
  - Rejection of additional projects
- Refinement of benchmarks and performance standards may be required over time to optimize balance of false positives/false negatives
  - Goal is provision of reasonable assurance that approved projects significantly exceed standard market practice
- Requires continuing evaluation of market conditions and periodic revisions to benchmarks and performance standards as market conditions change
  - Can't escape resource-intensive nature of ensuring offset project quality

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Overview of Model Rule Offsets Components

- Each eligible offset type has a standard in the model rule, outlining in detail the following:
  - Eligibility (includes additionality provisions)
  - Project description
  - Emissions baseline determination
  - Calculation of emissions reductions (or net carbon sequestered)
  - Monitoring and verification requirements

  - While proposed regulatory language is detailed, there will be the need for the development of guidance documents to clarify some regulatory requirements

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Overview of Model Rule Offsets Components

- Two-step application process
  - Consistency determination (made by regulatory agency):
    - Project eligibility
    - Certification of monitoring and verification plan
    - Emissions baseline determination, as appropriate
  - Submittal of monitoring and verification reports:
    - Must receive consistency determination prior to submittal of first M&V report
    - Offsets allowances issued based on emissions reductions demonstrated per approved M&V reports
  - Both steps of the process require independent verification component by accredited verifiers
  - Offset allowances awarded by regulatory agency

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For more information...

- **Specific regulatory language elaborated in RGGI model rule**
- **Model rule available at** http://www.rggi.org/modelrule.htm
- **Contact me if you have questions:**
  - 609-292-6818
  - christopher.sherry@dep.state.nj.us

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